

The Claims

For the convenience of the Examiner, a complete listing of the claims is provided, with a parenthetical indication of the status of each claim. No amendments are being made herewith.

1. (previously presented) Molten metal discharging device between a first upper container (1) and a second lower container (3), the device comprising a slide valve nozzle comprising an upper (42) and a lower (43) nozzle, the lower nozzle being movable with respect to the upper one, a circular blade (46), fixed to the base of the slide valve nozzle around a molten metal discharging aperture, said lower nozzle being inserted into said aperture with the lower end protruding from it, the discharging device comprising also a cylindrical jacket (22) defining a vertical axis and having at its upper end gas sealing means (24) adapted to be coupled to said circular blade (46) and adapted to surround the lower end of the lower nozzle (43) in operation, said cylindrical jacket (22) being fixed above said second container.
2. (previously presented) The device according to claim 1 wherein a tube (21) of refractory material is inserted inside said cylindrical jacket (22).
3. (original) The device according to claim 1 wherein said slide valve nozzle is able to be coupled to the base of the first container (1) with mountings (48, 49) fitted with eyelets able to receive pivots (50).
4. (previously presented) The device according to claim 1 wherein there are provided means for moving said lower nozzle (43) with respect to the upper nozzle (42) so as to regulate a liquid metal flux through the slide valve nozzle.
5. (original) The device according to claim 1 wherein said gas sealing means comprise an upwardly open toroidal container adapted to be filled with sand into which said circular blade (46) is sunk during operation.
6. (previously presented) The device according to claim 1 wherein there are provided means for injecting inert gasses into said cylindrical jacket (22).
7. (previously presented) Coupling method for containers, by means of a device according to claim 1, wherein there is provided a first container (1) placed at a level above a second container (3) and filled with molten metal, with the slide valve nozzle fixed to said first

container (1), comprising:

- a) putting in an operating position said second container (3) to receive molten metal from the first container (1);
- b) coupling said first container (1) in a predetermined position on said second container (3) by way of a movement comprising a descending component, so as to sink the circular blade (46) into the gas sealing means (24).